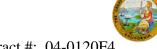
## DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/Ala Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-007719 Address: 333 Burma Road **Date Inspected:** 19-Jun-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Chen Ying Xin, Xu Le Feng, Li L**@WI Present:** Yes No

**Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A

**Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Tower Components

## **Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

#### Trial Assembly Area

This QA Inspector, George Goulet, randomly observed the following in the corner assemblies of segments 3AW/3BW in response to Bolting Inspection Notification Sheet No. 00034:

ZPMC workers performed final bolt tightening verification at the direction of ZPMC QC Hu Mei Gang (QC1) using ZPMC calibrated wrench identified by scribing on the handle as XO2-584. No less than 10% of the ASTM A325 bolt sets at each connection were torque tested, with a minimum of one bolt set tested at each connection. QC1 provided this QA Inspector, George Goulet, with the following information regarding the bolt sets installed at this location. This QA Inspector, George Goulet, observed ZPMC's Bolt Test Log for SFOBB (RoCap list), listing the RoCap Set numbers, bolt set size, and the N.M test result for torque tightening purposes. The information presented by QC1 appeared to this QA Inspector, George Goulet, to match the RoCap list. This QA Inspector, George Goulet, concurred with QC1 for the issuance of green tag numbers.

#### Bay 10

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 10:

SAW welding of weld joints SSD1-FDSA4-1A/C-9A, 11A located on PCMK south tower, lift 4, skin D. Welder was identified as 040252. ZPMC QC was identified as CWI Chen Ying Chin (QC1). Assisting QC1 at this

# WELDING INSPECTION REPORT

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location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Cheng Man Man, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-2221-B-U3b-S-2.

### Bay 11

This QA Inspector, George Goulet, randomly observed the following work in progress in Bay 11:

FCAW welding of weld joints ESD1-FASA4-2E/E-68, 69 located on PCMK east tower, lift 4, skin A. Welders were identified respectively as 068484, 067184. ZPMC QC was identified as CWI Xu Le Feng (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Tao Lu Hai, who was not a CWI. The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-B-T-2332-Tc-P5-F.

FCAW welding, using the southwest gantry, of weld joints ESD1-FASA4-2E/E-44, 45 located on PCMK east tower, lift 4, skin A. Welders were identified respectively as 070212, 070258. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Tao Lu Hai, who was not a CWI. The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-B-T-2332-Tc-P5-F.

FCAW welding, using the southeast gantry, of weld joints ESD1-FASA4-2E/E-23, 24, 88, 89 located on PCMK east tower, lift 4, skin A. Welders were identified respectively as 070046, 049220, 059525, 068206. ZPMC QC was identified as CWI (QC3). The welding variables recorded by QC3 appeared to comply with WPS-B-T-2332-Tc-P5-F.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

As noted above, and this QA Inspector, George Goulet, asked each welding QC if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each welding QC showed this QA Inspector, George Goulet, that each welding QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all each welding QC observed did appear to comply.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Serge Sinevod, 134-8257-0045, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer